

LESSON PLAN

SPECIFIC OBJECTIVES

- The students will learn about
- ✧ transport of materials in living beings
 - ✧ mode of transport of materials in animals and plants
 - ✧ circulatory system
 - ✧ excretion in animals
 - ✧ transport of substances in plants

TEACHING AIDS

Pictures/charts/models/animations on blood corpuscles in human blood, blood vessels, valves inside a vein, human heart, circulation of blood in human body; human excretory system, V.S. of skin; path of water and minerals in plants, structure of stomata.

LESSON PLAN

- ✧ Teacher will start the chapter by going through the points given in 'Know these points before you start' section.
- ✧ Now, teacher will discuss the transport of substances like nutrients, water and oxygen in living organisms from single-celled organisms to complex multicellular animals and plants.
- ✧ Teacher will discuss the modes of transport of materials, i.e., circulatory system in animals and vascular system in plants.
- ✧ Now, teacher will explain circulatory system, its parts, functions and working in humans.
- ✧ Teacher will ask students to solve Check Points 1 and 2.
- ✧ Now, teacher will discuss excretion in animals and types of body wastes.
- ✧ Teacher will explain excretory system and its parts in human beings.
- ✧ Teacher will also discuss other organs of excretion in human body.
- ✧ Teacher will ask students to solve Check Point 3.
- ✧ Now, teacher will discuss transport of water, minerals and food in plants.

- ✧ Teacher should explain the process of transpiration in plants by demonstrating related activities given in the chapter.
- ✧ Teacher will ask students to solve Check Point 4.
- ✧ Teacher will make students revise the new terms given under the head 'Know These Terms'.
- ✧ Finally, teacher will help students to solve the questions given in exercises under the head 'Practice Time' and 'Think Zone'.

BOOST UP

- ✧ Teacher should demonstrate and explain activities given in the chapter.
- ✧ Teacher should discuss the information given under the head 'Something More'.
- ✧ Teacher should discuss the conversation of Annu and Mannu given in between the topics.
- ✧ Teacher should discuss the facts given in the table.
- ✧ Teacher should encourage students to watch Discovery, National Geographic and Animal Planet channels to know more about plants and animals.
- ✧ Teacher should encourage students to observe the effects of transpiration in nature.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ transport of materials and modes of transport in living organisms.
- ✧ circulatory system and excretory system in human beings.
- ✧ transport of food, water and minerals in plants.
- ✧ transpiration and its importance

EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the understanding of students.

1. What is meant by circulatory system?
2. Mention few functions of blood.
3. What is the difference between RBCs and WBCs?
4. Where is heart located?
5. Where are kidneys present?
6. Write two functions of vascular system in plants.